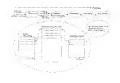
Executing partial-width packed data instructions

Also published as: Publication number: TW470914 (B) Publication date: 2002-01-01 DE19914617 (A1) Inventor(s): ROUSSEL PATRICE (FR): THAKKAR TICKY IGBI DE19914617 (C2) Applicant(s): INTEL CORP (US) 1 US2002010847 (A1) Classification: US6970994 (B2) G06F9/30; G06F9/302; G06F9/318; G06F9/30; G06F9/302; - international-US6230253 (B1) G06F9/318; (IPC1-7); G06F9/30 G05F9/30R4; G06F9/30R4S; G06F9/30T, G08F9/302; - Europeans 01509 >>

G08F\$/318: G08F8/318T Application number: TW19990105137 19990503 Priority number(s): US19980053127 19980331

Abstract of TW 470914 (8)

A method and apparatus are provided for executing scalar packed data instructions. According to one aspect of the invention, a processor includes a plurality of registers, a register renaming unit coupled to the plurality of registers, a decoder coupled to the register renaming unit, and a partialwidth execution unit coupled to the decoder. The register renaming unit provides an architectural register file to store packed data operands each of which include a plurality of data elements. The decoder is configured to decode a first and second set of instructions that each specify one of more registers in the architectural register file. Each of the instructions in the first set of instructions specify operations to be performed on all of the data elements stored in the one or more specified registers. In contrast, each of the instructions in the second set of instructions specify operations to be performed on only a subset of the data element stored in the one or more specified registers. The partial-width execution unit is configured to execute operations specified by either of the first or the second set of instructions



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